

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
27 October 2005 (27.10.2005)

PCT

(10) International Publication Number
WO 2005/101753 A1

(51) International Patent Classification⁷: **H04L 12/56**,
29/08, 29/06

Kauniainen (FI). **YLITALO, Jukka** [FI/FI]; Otsolahdentie
16 B 87, FIN-02110 Espoo (FI).

(21) International Application Number:
PCT/EP2004/050533

(74) Agents: **BREWER, Michael** et al.; Marks & Clerk, 4220
Nash Court, Oxford Business Park South, Oxford Oxford-
shire OX4 2RU (GB).

(22) International Filing Date: 15 April 2004 (15.04.2004)

(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (*for all designated States except US*): **OY LM
ERICSSON AB** [FI/FI]; FIN-02420 Jorvas (FI).

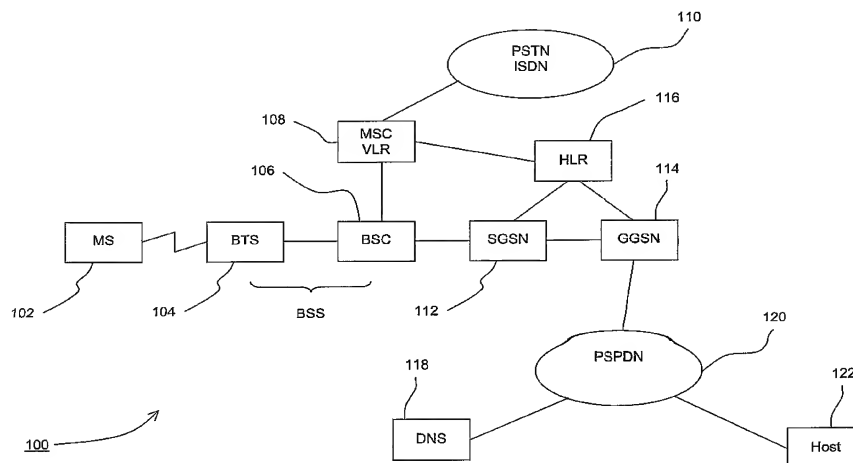
(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **JOKELA, Petri
Aulis** [FI/FI]; Säterinkatu 7A1, FIN-02600 Espoo (FI).
NIKANDER, Pekka [FI/FI]; Suvannontie 12 A 1,
FIN-00510 Helsinki (FI). **SALMELA, Patrik Mikael**
[FI/FI]; Hevoshaka 21, FIN-02410 Kirkkonummi (FI).
ARKKO, Jari [FI/FI]; Kauppalaantie 25 A 7, FIN-02700

(84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), Euro-
pean (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,
GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK,

[Continued on next page]

(54) Title: IDENTIFICATION METHOD AND APPARATUS FOR ESTABLISHING HOST IDENTITY PROTOCOL (HIP) CON-
NECTIONS BETWEEN LEGACY AND HIP NODES



(57) Abstract: A method is provided of using the Host Identity Protocol (HIP) to at least partially secure communications between a first host (102) operating in a first network environment and a second, HIP-enabled, host (122) operating in a second network environment, with a gateway node (114) forming a gateway between the two environments. In the method, an identifier is associated with the first host (102), stored at the gateway node (114), and sent to the first host (102). The identifier is then used as a source address in a subsequent session initiation message sent from the first host (102) to the gateway node (114), having an indication that the destination of the message is the second host (122). The stored identifier at the gateway node is then used to negotiate a secure HIP connection to the second host. The first network environment may be a UMTS or GPRS environment, in which case the gateway node may be a Gateway GPRS Support Node (GGSN).

WO 2005/101753 A1



TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— *with international search report*